GMU Math 106

Spring 2022 Syllabus

Instructor: Liz Dinkelman

Most of your grade will come from doing the work in the online learning management system called Hawkes. There will also be some other Excel and worksheet assignments in Blackboard. I will be available in the classroom, but there is no requirement that you attend class face-to-face except to take a short midterm and final. Other than that you may work completely online if you would prefer. It is expected that you will study the powerpoints outside of class. On Tuesday during class I will work with you on homework problems with which you are having difficulty, but you may also watch the videos in Hawkes for an explantion of problems. On Thursday during class I will explain the Excel assignments but an explanation of the Excel assignments is also available through videos in Blackboard. So it is possible to complete the course without ever attending the class except for the midterm and final. If there is a day that I wake up with a cold, flu, or covid symptom, I will either cancel class or switch class to zoom and will let you know by email before the class if that is happening. I expect that if you wake up with a cold, flu, or covid symptom that you will similarly not come to class and use the videos available to help you understand the material.

If you choose to come to the classroom, please come with a good fitting mask with both your nose and mouth properly covered. If you choose to come to the classroom do not remove the mask to eat or drink but leave the classroom if you need to take a sip of water, etc.

EMAIL: edinkelman@nvcc.edu (the nvcc email comes to my cell phone so I see emails more quickly at the nvcc address) or edinkelm@gmu.edu - Please use email for private discussions (not relevant to anyone else in the course), and anything else, post to the discussion board. I answer emails once a day (Monday – Friday). Provide in the subject line "Math106" and your name in any email you send. All math questions should be asked on the discussion boards.

Office hours: I am available for non-math questions via email, or you may email me to set up a time for a zoom appointment but you will need to contact me the day before so that I can set up a zoom link and send it to you in time.

Text: Viewing Life Mathematically (Custom for GMU) by Denley. Please use the free trial when you start using this system just in case after a week or so you decide to change your plans. Follow prompts for HAWKES on Blackboard.

Needed equipment: INTERNET, COMPUTER, EXCEL, Calculators: You will be required to have a calculator for the course with an e^x function and factorial function (!). I recommend the TI-30. If you already have a TI-83/84 then that will work fine but they are expensive so don't go and buy one. You will also use Excel for some more involved calculations. If you don't have Excel you can download a free version from GMU. You will see the instructions for that download in an announcement.

Free Excel: For those of you who do not have Excel but would like to have a free version from GMU here are Mason directions:

https://its.gmu.edu/knowledge-base/how-to-install-microsoft-365-apps-for-enterprise-on-your-computer/
Here is some trouble shooting

https://www.reddit.com/r/gmu/comments/9c8q4n/how do i download office 365 for free if im a/?utm s ource=amp&utm medium=&utm content=comments view all

Course Description: This course meets the quantitative reasoning requirement, one of the Foundation requirements of the University General Education program. The goal of the Foundation requirement is to help ensure that students are equipped with the tools and techniques necessary to succeed in college and throughout their lives and careers.

The learning objectives for this requirement are:

- 1. Students are able to interpret quantitative information (i.e., formulas, graphs, tables, models, and schematics) and draw inferences from them.
- 2. Given a quantitative problem, students are able to formulate the problem quantitatively and use appropriate arithmetical, algebraic, and/or statistical methods to solve the problem.
- 3. Students are able to evaluate logical arguments using quantitative reasoning.
- 4. Students are able to communicate and present quantitative results effectively.

The course will introduce the following material: Inductive and Deductive Reasoning, Sets, Logic, Counting, Probability, Statistics and Finance.

Exams will be online in Hawkes and no exam grade will be dropped. See Hawkes for the deadlines of exams and homework.

Grading: Your grade will be weighted as follows:

Assignments in Blackboard	20% (Students who turn these
assignments in late will receive a 50% reduction	in grade)

Introduction 2%

Hawkes Certify 40%

Exam 1 in Hawkes 10%

Exam 2 in Hawkes 10%

Midterm taken on paper in the Classroom 4% (Related to assignments 2 - 5

Exam 3 in Hawkes 10%

and will be closed notes. Bring your GMU ID)

Final taken on paper in the Classroom 4% (Related to assignments 6 - 9 (excludes 10) and will be closed notes. Bring your GMU ID)

The grading scale will be: A: 90-100%; B: 80-89%; C: 70-79%; D: 60-69%; F: below 60%.

+ or – may be attached to the grade for the upper or lower 2 points in each range

Late Penalties on Hawkes Homework and Exams 2 and 3:

1. 10% penalty for up to	2	day(s) late
2. 20% penalty for up to	7	day(s) late
3. 30% penalty for up to	21	day(s) late
4. 40 % penalty for more than	21	day(s) late

See Hawkes for Homework Deadlines.

Exam 1 is open on 2/21/22 at 6:00 a.m. and is late after 11:55 pm on 2/26/22

Exam 2 is open on 4/4/22 at 6:00 a.m. and is late after 11:55 pm on 4/9/22

Exam 3 is open on 5/9/22 at 6:00 a.m. and is late after 11:55 pm on 5/12/22

Discussion Boards: Please use the discussion board for ALL content and logistical questions about this course. Make sure you post under the correct forum and either reply to an existing thread or create a new one with a meaningful subject line indicating the unit/ chapter/section or topic you are discussing. Your post can show your **work**, ask a question or answer a question. You should also introduce yourself on the discussion board. This introduction is worth 1% of your grade.

HOW TO USE HAWKES Each lesson of the software offers three modes:

- 1. **Learn** is an interactive presentation of the material found in your textbook and includes instructional video clips and example problems.
- 2. **Practice** gives you access to unlimited practice problems, provides error-specific feedback for commonly made mistakes, hints for all incorrect answers, and includes an interactive Tutor with Step by-Step guidance and fully worked out solutions. Note that every question type from Certify can be found in the Practice mode.
- 3. **Certify** is the homework portion of the lesson. After answering the set of questions without exceeding the available strikes (or lives), you will receive a perfect 100% score for your homework. If you are not able to Certify in your attempt, you are able to start a new set of questions over again with no penalty. In the meantime, you may wish to spend more time in the Practice mode before attempting Certify again. You have unlimited attempts in each lesson to receive full credit before the due date.

Additional videos can be found at www.hawkestv.com.

GETTING HELP

Contact Hawkes with any technical questions, including creating your username and password, finding your Access Code or license number, or completing your work.

Phone: 1.800.426.9538 available Monday-Friday, from 8:00am-10:00pm ET.

Email: support@hawkeslearning.com

Chat: www.hawkeslearning.com/chat Chat support is available 24/7.

Disability statement: If you are a student with a disability and you need academic accommodations, please see me and contact the Office of Disability Resources at 703.993.2474. All academic accommodations must be arranged through that office. https://ds.gmu.edu/

Equity and Inclusion: George Mason University is an intentionally inclusive community that promotes and maintains an equitable and just work and learning environment. We welcome and value individuals and their differences including race, economic status, gender expression and identity, sex, sexual orientation, ethnicity, national origin, first language, religion, age, and disability. Please email me if you have any concerns about any feeling of inequity in this course.

GMU Math Tutoring Center: The Math Tutoring Center will be offering online tutoring services to students currently enrolled in undergraduate Math courses at GMU. More information can be found at: https://science.gmu.edu/academics/departments-units/mathematical-sciences/math-tutoring/tutoring-center-hours-and

Additional Resources/Student Services:

- Keep Learning, Learning Services https://learningservices.gmu.edu/keeplearning/
- Counseling and Psychological Services https://caps.gmu.edu/
- See a longer list of Mason student support services posted on The Stearns Center website: https://stearnscenter.gmu.edu/knowledge-center/knowing-mason-students/student-support-resources-on-campus/

University Honor Code: You are expected to follow the GMU Honor Code https://oai.gmu.edu/mason-honor-code/